WHAT IS CLAIMED IS:

1. A method for manufacturing an optical interference display unit disposed on a substrate, the method comprising:

forming a first electrode on the substrate;

forming a sacrificial layer on the first electrode;

forming at least two openings in the sacrificial layer and the first electrode to define a position of the optical interference display unit;

forming a first photosensitive material layer to fill the openings and cover the sacrificial layer;

patterning the first photosensitive material layer to form a support in each of the openings and at least one first supporting layer on the support, wherein the support and the at least one first supporting layer form a post;

forming at least one second photosensitive material layer on the sacrificial layer and the at least one first supporting layer;

patterning the at least one second photosensitive material layer to form a second supporting layer on the at least one first supporting layer, wherein the at least one first supporting layer and the second supporting layer form an arm;

forming a second electrode on the sacrificial layer and the arm;

performing a thermal process; and

removing the sacrificial layer.

2. The method for manufacturing an optical interference display unit of claim 1, wherein the first photosensitive material layer and the second photosensitive material layer are a photoresist layer.

3. The method for manufacturing an optical interference display unit of claim 1, wherein the step of patterning the first photosensitive material layer and the second photosensitive material layer includes a photolithographic process.

4. The method for manufacturing an optical interference display unit of claim 1, wherein the thermal process is baking.

5. The method for manufacturing an optical interference display unit of claim 1, wherein the thermal process makes the arm generate displacement due to stress.

6. The method for manufacturing an optical interference display unit of claim 1, wherein the second electrode is a deformable electrode.

7. The method for manufacturing an optical interference display unit of claim 1, wherein the second electrode is a movable electrode.

8. The method for manufacturing an optical interference display unit of claim 1, wherein the post is made from photoresist.

9. A method for manufacturing a matrix color optical interference display unit disposed on a substrate, the method comprising:

forming a first electrode on the substrate;

forming a sacrificial layer on the first electrode;

forming at least four openings in the sacrificial layer and the first electrode to define positions of a first optical interference display unit, a second optical interference display unit, and a third optical interference display unit;

forming a support in each of the openings and at least one first supporting layer on the support, wherein the at least one first supporting layer forms a first arm;

forming at least one second supporting layer on the at least one first supporting layer of the second optical interference display unit and the third optical interference display unit, wherein the at least one first supporting layer and the at least one second supporting layer form a second arm;

forming at least one third supporting layer on the at least one second supporting layer of the third optical interference display unit to increase the thickness thereof, wherein the at least one first supporting layer, the at least one second supporting layer, and the at least one third supporting layer form a third arm;

forming a second electrode on the sacrificial layer and the first arm, the second arm, and the third arm;

performing a thermal process; and

removing the sacrificial layer.

10. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the support and the first arm, the support and the second arm, and the support and the third arm form posts.

11. The method for manufacturing a matrix color optical interference display unit of claim 10, wherein a material for forming the posts is selected from a group consisting of photosensitive materials, non-photosensitive materials and a combination thereof.

12. The method for manufacturing a matrix color optical interference display unit of claim 11, wherein the photosensitive materials are a photoresist.

13. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the step of forming the support and the at least one first supporting layer comprises:

forming a first photosensitive material layer to fill the openings and cover the sacrificial layer; and

patterning the first photosensitive material layer to form the support in each of the openings and the at least one first supporting layer on the support.

14. The method for manufacturing a matrix color optical interference display unit of claim 13, wherein the step of patterning the first photosensitive material layer includes a photolithographic process.

15. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the step of forming the support and the at least one first supporting layer further comprises:

forming a first non-photosensitive material layer to fill the openings and cover the sacrificial layer; and

patterning the first non-photosensitive material layer to form the support in each of the openings and the first arm on the support by a photolithographic etch process, wherein the support and the at least one arm are formed the post.

16. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the thermal process is baking.

17. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the thermal process makes the first arm, the second arms, and the third arm to generate displacement due to stress.

18. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the second electrode is a deformable electrode.

19. The method for manufacturing a matrix color optical interference display unit of claim 9, wherein the second electrode is a movable electrode.